

## REMARKS

### INTRODUCTION

In accordance with the foregoing, claims 1, 7, 13, 19, 25 and 31 have been amended. Claims 2-5, 8-11, 14-17, 20-23, 26 and 28 have been cancelled. Claims 1, 6, 7, 12, 13, 18, 19, 24, 25, 27 and 29-34 are pending and under consideration.

### CLAIM REJECTIONS – 102

Claims 1, 6, 7, 12, 13, 18, 19, 24-26, 29 and 31 were rejected under 35 USC 102(b) as being anticipated by Hirotsune et al. (US 5,709,978) (hereinafter "Hirotsune").

Claims 1-6, 13-18 and 25-30 were rejected under 35 USC 102(e) as being anticipated by Kato et al. (US 6,999,392) (hereinafter "Kato").

Claims 1-34 were rejected under 35 USC 102(e) as being anticipated by Hwang et al. (US 2005/0254408) (hereinafter "Hwang").

Claims 1, 2, 5, 6, 19, 20, 22, 25, 26, 28 and 30 were rejected under 35 USC 102(e) as being anticipated by Kim et al. (US 7,087,284) hereinafter "Kim '284")

Claims 1, 2, 5, 6, 25, 26, 28 and 29 were rejected under 35 USC 102(e) as being anticipated by Kim et al. (US 7,166,346) (hereinafter "Kim '346")

Claims 1, 2, 5, 6, 25, 26, 28 and 29 were rejected under 35 USC 102(e) as being anticipated by Kim et al. (US 2004/0247891) (hereinafter "Kim '891").

Amended independent claims 1, 7, 13, 19, 25 and 31 all recite that the high melting point recording layer consists of at least one of tungsten, tantalum, a tungsten compound, and a tantalum compound. Support for the amendments to the independent claims may be found in at least claims 2-5, 8-11, 14-17, 20-23, 26 and 28.

Regarding the rejection based on Hirotsune, it is respectfully submitted that Hirotsune only discloses a Sb-Te-Ge or Sb-Te-In the recording layer which therefore does not anticipate the high melting point recording layer consisting of at least one of tungsten, tantalum, a tungsten compound, and a tantalum compound recited in the independent claims of the present invention.

Regarding the rejection based on Kato, it is respectfully submitted that the recording layer of Kato is comprised of Sb, Te and, optionally, for the increase in the crystallization temperature of the recording layer, at least one element selected from In, Ag, Au, Bi, Se, Al, P, Ge, H, Si, C, V, W, Ta, Zn, Ti, Sn, Pb, Pd, and rare earth elements, as is discussed 16:25-16:40

of Kato, in this regard. Accordingly, the recording layer of Kato also does not anticipate the high melting point recording layer consisting of at least one of tungsten, tantalum, a tungsten compound, and a tantalum compound recited in the independent claims of the present invention.

Regarding the rejections based on Hwang, Kim '284, Kim '346 and Kim '891, it is respectfully submitted that these references are not available as prior art under 35 USC 102(e) because the PCT filing date of May 16, 2003 of the present application predates the filing dates for all of Hwang (May 3, 2005), Kim '284 (September 20, 2004), Kim '346 (March 31, 2004) and Kim '891 (May 20, 2004).

Claims 2-5, 8-11, 14-17, 20-23, 26 and 28 have been cancelled. Claims 6, 12, 18, 24, 27, 29, 30 and 32-34 depend on one of claims 1, 7, 13, 19, 25 and 31, respectively, and are therefore believed to be allowable for at least the foregoing reasons.

Withdrawal of the foregoing rejections is requested.

#### **CLAIM REJECTIONS – DOUBLE PATENTING**

Claims 1, 2, 5, 6, 19, 20, 22, 25, 26, 28 and 30 were rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claim 7 of Kim '284.

Claims 1, 2, 5, 25, 26, 28 and 29 were rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claim 7 of Kim '346.

The double patenting rejection in view of Kim '284 and Kim '346 is respectfully traversed on the grounds that they are totally different from the present invention as recited in independent claims 1 and 25 in that the tungsten oxide (WO<sub>x</sub>) of Kim '284 and Kim '346 is used as a mask layer or a volume expansion layer, not a recording layer.

Withdrawal of the foregoing rejections is requested.

#### **PROVISIONAL CLAIM REJECTIONS – DOUBLE PATENTING**

Claims 1-34 were provisionally rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 21 and 25 of Hwang.

Claims 1, 2, 5, 6, 19, 20, 22, 25, 26, 28 and 30 were provisionally rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 4, 26 and 45 of Kim et al. (US 2005/0207327) (hereinafter "Kim '327")

Claims 1, 2, 5, 6, 25, 26, 28 and 29 were provisionally rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 30 and 52 of Kim '891.

Regarding the provisional double patenting rejections, as these rejections are provisional, it is respectfully requested that they be held in abeyance until the claims are otherwise in a condition for allowance.

#### CONCLUSION

There being no further outstanding objections or rejections, it is submitted that the application is in condition for allowance. An early action to that effect is courteously solicited.

Finally, if there are any formal matters remaining after this response, the Examiner is requested to telephone the undersigned to attend to these matters.

If there are any additional fees associated with filing of this Amendment, please charge the same to our Deposit Account No. 19-3935.

Respectfully submitted,

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